

SANYO	No.2251B	LA4280
	2-Channel 10W AF Power Amp for Home Stereo, TV Use	

Features

- High-power 2-channel AF power amp
- Low distortion
- Minimum number of external parts required (no bootstrap capacitor required)
- Low pop noise at the time of power switch ON/OFF
- Excellent ripple rejection (58dB typ)
- Wide operating voltage range (10V to 40V)
- External muting available
- On-chip protector against abnormalities (thermal shutdown, overvoltage)

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Condition	Value	Unit
Maximum Supply Voltage	V _{CC} max	Quiescent	45	V
Maximum Output Current	I _o peak		4	A
Allowable Power Dissipation	P _d max	With heat sink	25	W
Operating Temperature	T _{opr}		-20 to +75	°C
Storage Temperature	T _{stg}		-40 to +150	°C

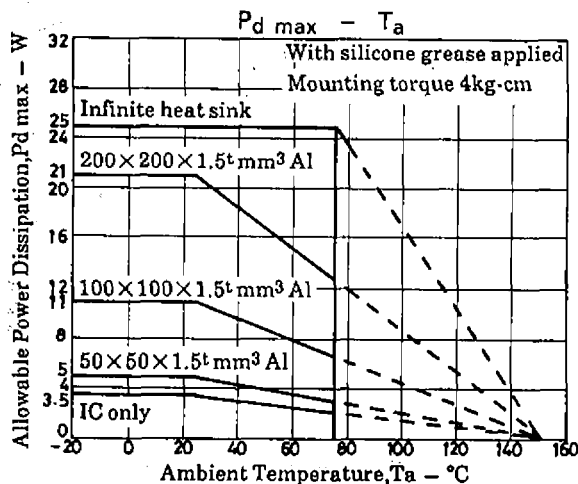
Operating Conditions at Ta = 25°C

Parameter	Symbol	Value	Unit
Recommended Operating Voltage	V _{CC}	32	V
Recommended Load Resistance	R _L	8	Ω
Operating Voltage Range	V _{CC} op	10 to 40	V

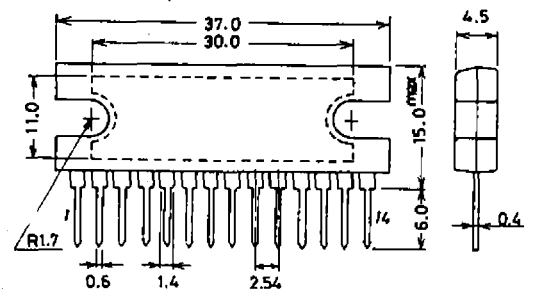
Operating Characteristics at Ta = 25°C, V_{CC} = 32V, R_L = 8Ω, f = 1kHz, R_g = 600Ω,

Parameter	Symbol	Condition	min	typ	max	unit
Quiescent Current	I _{cco} (1)	Quiescent	30	60	100	mA
		MT/SW on	30	56	100	mA
Voltage Gain	V _G		38	40	42	dB
Voltage Gain Difference	ΔV _G				1.5	dB

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Package Dimensions 3023A-S14HIC (unit: mm)



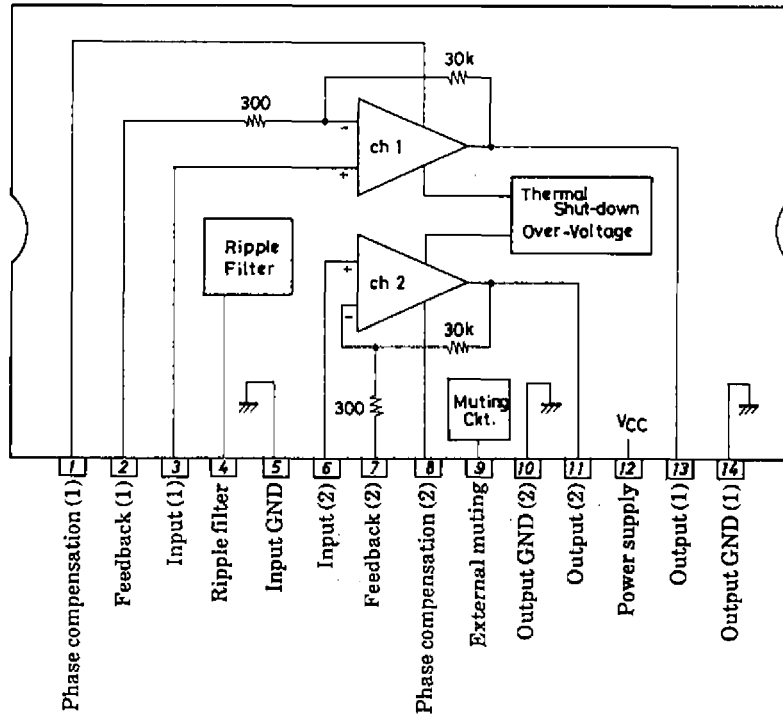
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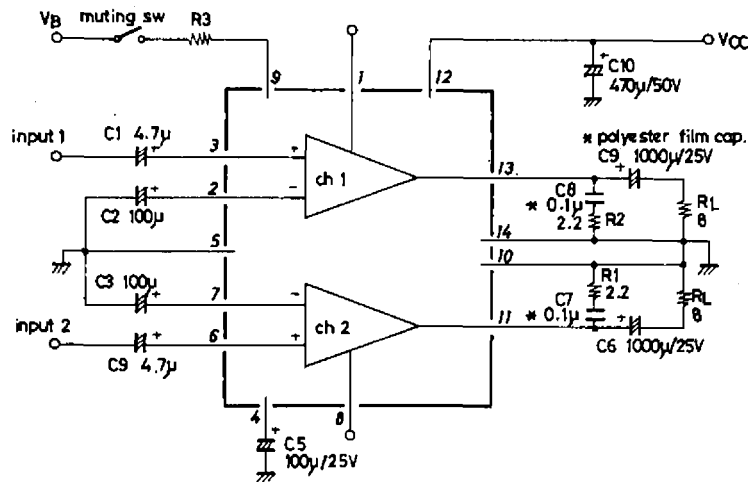
			min	typ	max	unit
Output Power	Po (1)	THD=1%	9.0	10.0		W
	Po (2)	THD=3%	10.0	11.5		W
Total Harmonic Distortion	THD	Po=2W		0.05	0.20	%
Output Noise Voltage	V _{NO}	R _g =10kΩ, BW=20Hz to 20kHz		0.25	1.0	mV
Ripple Rejection	SVRR	R _g =10kΩ, f _R =100Hz, V _R =0dBm	45	58		dB
Crosstalk	CT	R _g =10kΩ	45	60		dB
Muting	V _o (MT)	MT/SW on, V _i =-5dBm			-35	dBm

Equivalent Circuit Block Diagram and Pin Assignment



Unit (resistance: Ω)

Sample Application Circuit



Unit (resistance: Ω, capacitance: F)

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